



ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc.

1791 Tullie Circle, NE • Atlanta, Georgia 30329-2305 ☎404-636-8400 • Fax 404-321-5478

TC/TG/TRG MINUTES COVER SHEET

TC/TG/TRG NO.: TC 9.01 ISSUE DATE: May 23, 2013

TC/TG/TRG TITLE: Large Building Air-Conditioning Systems

DATE OF MEETING: January 29, 2013 LOCATION: Dallas, Tx

MEMBERS PRESENT	TERM END	MEMBERS ABSENT	TERM END	ADDITIONAL ATTENDANCE
Kelley Cramm, Chair	6/30/2013	Warren Hahn,	6/30/2013	<u>Corresponding Members:</u> Alonzo Blalock Steve Nicklas R.Lee Millies, Jr. <u>Liaisons / Staff / Ex-Officio Members:</u> Not Present <u>Guests:</u> Kasey Worthington Tony Fisher Steven Snyder Kamel Haddad Jim Harrison Gareth Nelson
John L Kuempel Jr, Vice Chair	6/30/2014	Publication Liaison	6/30/2013	
Howie McKew, Secretary	6/30/2015	Lynn Werman, Membership Sub-C Chair	6/30/2014	
Bill Klock, Research Sub-C Chair	6/30/2013	Quinn Hart, Member	6/30/2014	
Charlie Henck, Standards Sub-C Chair	6/30/2013	Gene R Strehlow ALI/PDC Coordinator	6/30/2014	
Steve Duda Honors & Awards Sub-C Chair	6/30/2016	Phil Trafton, Non- Quorum Member	6/30/2012	
Mark Fly, Web Master	6/30/2013	Dennis Wessel, Program Sub-C Chair		
Doug Cochrane, Member	6/30/2013			
Jay Eldridge, Member	6/30/2015			
John I Vucci, Member	6/30/2015			
Jeff Traylor, Member	6/30/2016			
Hollace Bailey, Member	6/30/2013			
Ken Gill, Member	6/30/2016			

DISTRIBUTION

ALL MEMBERS OF TC/TG/TRG

TAC COMMITTEE CHAIR: Charles Culp

TAC SECTION HEAD: Thomas M Lawrence

LIAISONS:

CEC Liaison: Dennis Wessel Publications Liaison: Warren Hahn (NP) Special Pubs Liaison: Francis Mills (NP)
 Handbook (Section Head): Thomas M Lawrence (NP) Research Liaison: Carl Huber (NP)
 Professional Development Liaison: Don Brandt CTTC Liaison: Jay Cederberg (NP)
 Staff Liaison/Research/Technical Services: Michael R Vaughn (NP) Manager of Standards Liaison: Stephanie Reiniche (NP)
 Standards Liaison: Cecily M Grzywacz (NP)

** NP Not Present

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ASHRAE TC/TG/TRG ACTIVITIES SHEET

ISSUE DATE: May 23, 2013

TC/TG/TRG NO.: T.C. 9.01 TC/TG/TRG TITLE: Large Building Air-Conditioning Systems

CHAIR: Kelley Cramm

VICE-CHAIR: John Kuempel Jr

SECRETARY: Howie McKew

TC/TG/TRG MEETING SCHEDULE

Location - Past 48 Months	Date	Location - Planned Next 36 Months	Date
Louisville, KY	6.23.2009	Denver, CO	6.22.2013
Orlando, FL	1.26.2010	New York, New York	1.18.2014
Albuquerque, NM	6.29.2010	Seattle, Washington	6.28.2014
Las Vegas, NV	2.01.2011	Chicago, IL	1.24.2015
Montreal, PQ (Canada)	6.28.2011	Atlanta, GA	6.27.2015
Chicago, IL	1.24.2012		
San Antonio, TX	6.23.2012		
Dallas, TX	1.26.2013		

TC/TG/TRG SUBCOMMITTEES

Function	Subcommittee Chair
ALI/PDC Coordinator	Gene Strehlow
Handbook	Howard McKew
Honors and Awards	Steve Duda
Membership	Lynn Werman
Programs	Dennis Wessel (John Kuempel taking over for Dennis)
Publications	Warren Hahn
Standards	Charlie Henck
Research	William Klock
Standards Issues	No Assignment
Webmaster	Mark Fly

RESEARCH PROJECTS – CURRENT

Project Title	Contractor	Monitoring Comm. Chairperson	Report Made At Mtg.
<i>NONE</i>			

LONG RANGE RESEARCH PLAN

Rank	Title	W/S Written	Approved	To RAC
	<i>1684 RTAR: Dispersion of Refrigerant to Connecting Spaces via Transfer Openings</i>	Under development		

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ASHRAE TC/TG/TRG ACTIVITIES SHEET (continued)

HANDBOOK RESPONSIBILITIES				
Year & Volume	Chapter Title	Chapter No	Reviser & Mentor-Reviser	Reviewer
2016 Systems & Equip	HVAC System Analysis and Selection	1	Mark Fly/Kasey Worthington	/ /
2016 Systems & Equip	Decentralized Cooling and Heating	2	Gene Strehlow/Steve Nicklas	John V/ /
2016 Systems & Equip	Centralized Cooling and Heating	3	Steve Duda/ Dan Leath	/ /
2016 Systems & Equip	Air-Handing and Distribution	4	Lynn Werman/ ___TBD	/ /
2016 Systems & Equip	In-Room Units and Distribution	5	Bill Klock/Robby Tefft	/ /
STANDARDS ACTIVITIES - List and Describe Subjects				
STD 15-2004 <i>Safety Standard for Refrigeration Systems</i> – Continuous Maintenance, Cognizant TC is 9.01, Steve Duda is liaison.				
Guideline 0-2005 <i>The Commissioning Process</i> – TC 9.01 is co-cognizant.				
Guideline 16-2003 <i>Selecting Outdoor, Return, and Relief Dampers for Air-Side Economizer Systems</i> – Cognizant TC is 9.01.				
Guideline 22—2008 <i>Instrumentation for Monitoring Central Chilled-Water Plant Efficiency</i> - Cognizant TC is 9.01				
TECHNICAL PAPERS from Sponsored Research – Title, when presented (past 3 yrs. present & planned)				
1. None.				
TC/TG SPONSORED TRANSACTION SESSIONS – Title, when presented (past 3 yrs. present & planned) & Chair				
1. Conference Paper – Rehab for DDC at Corporate National Training Center – Three Years of Therapy - Winter, 2011 – Las Vegas, Blalock				
2. Conference Paper - Application of ASHRAE Standard 15-2010 with Respect to Multi-Evaporator Split Air-Conditioning Systems – Summer 2011 – Montreal, Duda				
TC SPONSORED SEMINARS – Title, when presented (past 3 years, present, & planned) & Chair; Speaker, Speaker, Speaker				
1. <i>Retrofitting HVAC in Older Buildings for Higher Efficiency</i> (2010 Annual-Albuquerque) Kuempel, Duda, Cramm				
2. <i>High Performance Run Around Energy Recovery Systems</i> (2010 Annual – Albuquerque) Niederer				
3. <i>HVAC Security- Less we forget</i> (2011 Winter-Las Vegas) McKew; Cogley, Dobbs, & Campbell				
4. <i>Case Studies: New Equipment & Applications to Improve Energy Efficiency</i> (2012 Winter-Chicago) Cramm; Kuempel, McKew, & Schwedler				
5. <i>When Integrated Controls Are Not Integrated</i> (2012 Summer-San Antonio) Cramm; Rimmer, McKew, & Conlan				
6. Smart Methods to Prevent Electrical Harmonics Problems in Buildings (2013 Winter-Dallas TX)				
7. Hydraulic Modeling (2013 Winter-Dallas TX) Klock; Simmons & Stinson				

ASHRAE TC/TG/TRG ACTIVITIES SHEET (continued)

TC/TG SPONSORED FORUMS
1. None.
JOURNAL PUBLICATIONS
1. No publication articles between June 2012 and January 2013 by TC 9.01 Members

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TC 9.01 Large Building Air-Conditioning Systems

Meeting Minutes

Meeting Date: January 29, 2013

Dallas, Texas

I. Call to Order

- a) Chair Kelley Cramm called the meeting to order at 1:00 PM local time,

II. Introduction of Members And Guests

- a) Self-introductions of members and guests were made around the table as the attendance roster was circulated. Chair welcomed all members and visitors. A quorum was verified.

Voting Members:	10 Present 7 Absent, Quorum achieved_(3-more joined meeting later)
Voting Non-Quorum Members:	0 Present 1 Absent
Corresponding Members:	3 Present
Society Liaisons:	0 Present
Staff Liaisons:	0 Present
Guests:	6 Present

Note: Voting Non-Quorum members are voting members if present, but do not count against quorum if absent.)

III. Minutes from San Antonio Annual Winter Meeting 2012

- a) Jeff T moved that the meeting minutes “as corrected” be approved and Ken G seconded.
- b) Motion carried 10-0-0-0-0.

Secretary’s Note: All votes recorded herein are formatted as (Aye-Nay-Abstain-Chair not voting-Absent).

IV. Agenda Comments / Updates (K. Cramm)

- a) No Additions to Agenda requested.

V. Chair’s Comments and Section 9 Report (K. Cramm)

- a) Kelley attended section meeting and gave summary of conference exhibit committee for Denver Annual meeting.
- b) Roster update is in process.
- c) TAC had presentation on “talking to your local Chapter” as to what TC’s do
- d) Request that Bio’s be updated on the ASHRAE web site. Based on the sign-in sheet there are a few Bio’s needing update.
- e) CEC has requested reviewers for papers and seminars.

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Chair's Comments & Section 9 Report (continued)

- f) YEA – TC Mixer had 3- members present from TC 9.01
- g) There is a new TC in 9.4 for Justice Facilities

VI. ASHRAE Liaison Reports

- a) None Present

TC 9.01 Subcommittee Reports

a) Membership (Werman): Lynn could not attend the meeting so Kelley C noted there are 17 voting members and 1-non quorum member with Rodney Lewis retiring as an ASHRAE participant. Kelley sent out an email to all corresponding members asking if they want to continue to be a corresponding member and if “no response” the name(s) would be removed from the roster. Effective July 1st, 2013, the TC 9.1 Members and Corresponding Members are as follows:

- 8-rolling off to Corresponding Members: K. Cramm, W. Klock, C. Henck, W. Hahn, L Werman, M. Fly, H. Bailey, & D. Cochrane,
- Joining as Voting Members: R.L. Millies & A. Blalock
- Steve Nicklas will become secretary July 1st

b) Handbook (McKew): 2016 Systems and Equipment Handbook revision has started and all 5-chapters have a Reviser. Howie to schedule a conference call with the 5-Revisers before the Summer Annual conference.

c) Standards (Henck): Standard 22 being revised. Guideline 16 is up for reaffirmation.

- Mark F moved that Guideline 16 be reaffirmed and Steve D. seconded it.
- Motion carried 10-0-0-0-0.

d) Research (Klock):

- RP-1448 – *Chiller Room Ventilation*, Steve D. noted that a technical paper on this research project was presented in San Antonio.
- RTAR-1684 - “Dispersion of Refrigerant Releases to Connecting Spaces via Transfer Openings” was accepted by RAC. Steve D. asked the committee to agree to sponsor the research.
 - Ken G. moved that the committee approve moving forward with a work statement.
 - John K. seconded
 - Motion carried 10-0-0-0-0.

Steve indicated that the work statement will be developed for committee approval in Denver. He will circulate it in advance of the Denver meeting for review.



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- e) Program (Kuempel): John K. is taking over the Program Subcommittee Chair from Dennis Wessel.
 - TC should consider proposing a seminar for Denver in the following track: “Mile High Efficiency and Equipment”. Steve D. and John K. offered to speak and Kelley C. agreed to Chair the proposed seminar.
 - Kelley C. will reach out to the Track Chair (Pam Androff) to let know the TC is interested in submitting a seminar.
 - Bill K moved that the seminar be submitted for Denver
 - Jay E seconded the motion.
 - Motion carried 10-0-0-0-0.
 - Consideration should be given to proposing a Case Study seminar in New York next winter titled “ How to Score an Energy Star Building”
 - John K to schedule a conference call in March for the New York program.
- f) Professional Development (G. Strehlow): Gene was not available to attend
- g) Honors & Awards (Duda):
 - Mark Fly received the ASHRAE Fellow award
 - John Kuempel received the Distinguished Service Award
 - TC will resubmit the Group’s nominee for the George B. Hightower award
 - One ASHRAE Fellow candidate was submitted.
- h) Publications (Hahn): Warren was not available to attend
- i) Website Report (M. Fly):
 - Mark confirmed the Meeting Minutes are posted
 - Kelley to send the latest roster to him for posting.

VII. TC/PC Liaison Reports

- a) TC 1.12 – Moisture Management (J. Traylor) No new news
- b) TC 4.03 – Ventilation & Filtration (S. Duda) Work is being done on researching garage adjacent to residential space for infiltration. 4.03
- c) TC 5.06 – Control & Smoke (P Trafton) No new news.
- d) TC 6.01 – Hydronic and Steam Heating Equipment and Systems (K. Cramm) Chilled water plant design guide is not going forward.
- e) TC 6.02 - District Energy There is a design guide proposed for Middle East and another guide for buried pipe.
- f) TC 7.05 – Smart Building Systems (G. Strehlow) No new news.
- g) TC 7.07 - Testing & Balancing (H. Brickman) No new news.



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- h) TC 7.09 – Building Commissioning (J. Traylor) A position paper on “commissioning to be done by a P.E. in responsible charge” is being developed. Also, Standard 202 Standard for Commissioning is out for public review.
- i) TC 8.07 - Variable Refrigerant Flow (S. Duda) Addressed by Steve D earlier.
- j) TC 9.06 – Healthcare (J. Traylor) No new news.
- k) TC 9.08 – Large Building Applications (S Nicklas) TC 9.04 spin off for justice facilities. Actively looking for new members
- l) TC 9.90 - Mission Critical Facilities (K. Gill) No new news.
- m) TC 9.12 – Tall Buildings (M. Fly) Tall Building design guide is being revised.
- n) SSPC 62- Indoor Air Quality (Open) No report
- o) SSPC 15 Mechanical Refrigeration Safety (Duda) No new news.
- p) TG-2- HVAC Security (McKew) No new news.
- q) TRG-7 Under-Floor Air (D.Wessel) A new design guide is up for review.

VIII. Old Business

- a) Group should consider having subcommittee meetings via conference calls before the next meeting. The ASHRAE point-person to coordinate conference calls is Mike Vaughn.

IX. New Business

- a) TC e-meeting can be helpful for smaller TC’s.

X. Adjournment

- a) Next Meeting: Tuesday, June 25, 2013 at 1:00 pm MDT in Denver, CO
- b) Meeting adjourned at 3:30 PM. Moved by Jeff Traylor and seconded by Ken Gill.

XI. Attachments:

- B: TC 9 1 San Antonio 2012 Agenda and Attachments

End of Minutes

Respectfully submitted by:

Howard McKew, Secretary



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SUMMARY OF MOTIONS:

Secretary's Note: All votes recorded herein are formatted as Aye-Nay-Abstain-Chair Not Voting-Absent.

Motion: Jeff Traylor

Second: Ken Gill

Text: Approve the Chicago Meeting Minutes.

Vote: Motion Carried 10-0-0-0-6

Motion: Mark Fly

Second: Steve Duda

Text: Guideline 16 be reaffirmed

Vote: Motion carried 10-0-0-0-0.

Motion: Ken Gill

Second: John Kuempel

Text: Sponsor research project RTAR-1684 "Dispersion of Refrigerant to Connecting Spaces via Transfer Openings"

Vote: 10-0-0-0-0

Motion: Bill Klock

Second: Jay Eldridge

Text: Mile High Efficiency and Equipment Seminar Proposal

Vote: Motion carried 10-0-0-0-0
